Remarks/Arguments

Claims 1-9 stand rejected. Claims 7-40 have been cancelled. The claims remain rejected as follows:

Claims 1-8 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Number 6,596,304 (the '304 patent), which is said to disclose "a cellular" collagen.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being obvious in light of the '304 patent in view of U.S. Patent Number 6,077,987 (the '987 patent).

Rejection under 35 U.S.C. §102(e).

Claims 1-8 remain rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Number 6,596,304, which is said to disclose collagen I, III and fibroblasts.

In the Final Office Action it is stated that the rejection is maintained because the collagen in the '304 patent is "inherently a cellular collagen (Col. 4, lines 27-29)." (emphasis added). In the response to Applicant's arguments, the Action refers in multiple locations to the invention and its rejection under the '304 patent in terms of "a cellular" collagen, referring to an article "a" and its object and noun "cellular," which Applicant interprets to mean that the source of the collagen is a cell. Furthermore, the only embodiments shown in the '304 patent are described as follows:

> According to the invention, the term "collagenic constituent" preferably designates collagen which has at least partially lost its helical structure through heating or any other method, or gelatine. (Col. 3 l., 66 – Col 4, l. 2).

Therefore the only teachings in the '344 patent are to heat-denatured or gelatine collagen, that is, collagen that had been denatured and is not native collagen.

Applicant also wishes to distinguish the phrase "a cellular" from the adjective, "acellular". That collagen is derived from "a cell" describes the manner in which the collagen is made, that is, a cell is responsible for the synthesis of the collagen strand precursors that are then assembled outside the cell. In contrast to the Action's characterization of the source of the collagen as being "a cellular", what is claimed by the present Applicant is collagen that has already been assembled (whether by cells themselves, obtained from a tissue or assembled biochemically (i.e., in vitro)) and that has been rendered "acellular", that is, without cells. The claims of the present invention are to "acellular collagen", which is collagen that has been treated rendered the collagen without cells ("acellular"). The term "acellular" as defined in WEBSTER'S MEDICAL DESK DICTIONARY,

Merriam Webster (1986) is as follows (a copy of which is attached hereto as Appendix 1):

acel-lu-lar *adj* : containing no cell : not divided into cells.

Unlike the '304 patent, the present invention renders the collagen "acellular" (without cells) without the need for harsh chemical or physical treatments. The heat-denatured collagen of the '304 patent increases in antigenicity, which the skilled immunologist will recognize as increasing the potential antigenicity of a graph or patch. Using the treatment of the present invention that potential antigenicity is avoided. The term "acellular" distinguishes the present invention from the '304 patent.

The '304 patent does not include each and every element of claims 1-8 as amended and Applicant respectfully requests that the rejection of claims 1-8 under 35 U.S.C. §§ 102(e) over the art cited be withdrawn.

Rejections for Obviousness under 35 U.S.C. § 103(a)

A. Statement of Joint Inventorship

Applicant was advised in the Office Action of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a). Applicant believes that the inclusion of the paragraph on joint inventorship is in error because there is only one inventor of the present invention and there has never been joint inventors in this or the parent application, now U.S. Patent No. 6,599,526. Applicant requests withdrawal of the rejection.

B. Rejection of Claim 9 under 35 U.S.C. § 103 (a) based on the '304 patent, in view of the '987 patent.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being obvious in light of the '304 patent, in view of the '987 patent. Claim 9 has been cancelled, Applicant respectfully submits that the rejection is now moot.

Conclusion

In light of the remarks and arguments presented above, Applicant respectfully submits that the claims in the Application are in condition for allowance. Favorable consideration and allowance of the pending claims is therefore respectfully requested.

If the Examiner has any questions or comments, or if further clarification is required, it is requested that the Examiner contact the undersigned at the telephone number listed below.

Dated: December 28, 2006

Respectfully submitted,

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